BUILD UPON Framework

An Introduction for Policy Makers & Local Authorities

The BUILD UPON Framework helps cities and local authorities measure the different benefits of building renovation in a simple and consistent manner.

Why the BUILD UPON Framework is useful

Buildings account for 36% of the EU's annual greenhouse gas emissions. Therefore, renovating existing buildings to reduce their carbon emissions is key to achieving the EU's ambition to reach climate neutrality by 2050. The majority of Europe's buildings will need upgrading.

Fortunately, building renovation at scale can help tackle many other societal challenges: reducing energy consumption and improving energy security; reducing energy poverty and improving health; boosting economies and supporting local skills and jobs.

Policy Makers

Understanding and measuring these benefits will inform a wide range of policy decisions.



Climate change targets & strategies



Energy infrastructure needs & investment



Healthcare needs & costs

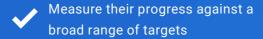


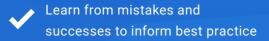
Fuel poverty alleviation

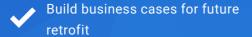
Click here for policy recommendations and information on how EU technical assistance can be used to implement the BUILD UPON Framework.

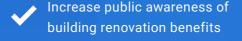
Local Authorities

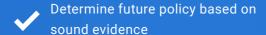
Understanding and measuring these benefits helps Local Authorities:











How the BUILD UPON Framework works

The Framework defines Environmental, Social and Economic indicators that can be measured. It shows how to measure them and provides tools to aid data collection. This helps cities and local authorities capture data in a simple but standardised format.

The Framework is flexible, easy and free to use. It covers all buildings types. It can be used at a city level - to measure impacts across an entire area and support a city's Sustainable Energy & Carbon Action Plan; or a project level - to measure the impacts of individual projects. Local Authorities can measure all of the indicators or focus on just one or two to suit their priorities and resources.





Web: www.worldgbc.org



ENVIRONMENTAL

0

HEALTH & WELLBEING

SOCIAL

(W)

ECONOMIC

(\$)

13 core **INDICATORS**

EXAMPLE IMPACTS

(not based on real project data)

Env. 1 **Energy Renovation Rate**

Env. 2 **CO2 Emissions**

Env. 3 **Energy Consumption**

Env. 4 **Renewable Energy Production**

Soc. 1 **Energy Poverty**

Soc. 2 **Indoor Air Quality**

Soc. 3 **Winter Thermal Comfort**

Soc. 4 **Summer Thermal Comfort**

Eco. 1 **Investment in Energy Renovation**

Eco. 2 Cost Efficiency of Energy **Reductions**

Eco. 3 **Jobs in Energy Renovation**

Eco. 4 **Upskilling in Energy Renovation**

Eco. 5 **Financial Savings from Energy** Renovation

0.5% of the city's housing renovated under this

1,260 ton CO2/yr saved from heating and powering 300 homes. 60% reduction on average

Energy consumption reduced from 15,000kWh/yr to 8,000kWh/yr for the average home

900,000 kWh/yr produced by PVs on the 300 homes, supplying almost f 40% of the homes' energy needs

% of households at risk of energy poverty reduced from 25% to 3%

Before renovation, many homes had damp and mould. Now, **95%** of the homes enjoy good Indoor Air Quality.

Before renovation, many homes were underheated and draughty. Now, 100% of homes are warm and comfortable in winter

Before renovation, most homes suffered from summer overheating. Now, **60%** of homes remain comfortable in summer

€7.5m total project cost €25,000 spent per home on average

280kWh/yr saved for each €1,000 invested

60 FTE jobs directly supported throughout the 18 month project

n/a: city level indicator only

Energy bills reduced by €400/yr to €900/yr per home